

Multi-Function Automatic

Blood Pressure Monitor



Bilingual Instruction Guide - Model UA-851 English • Español Please read this important information before using your monitor.

- Please remember that only a medical practitioner is qualified to interpret your blood pressure measurements. Use of this device should not replace regular medical examinations.
- Consult your physician if you have any doubt about your readings. Should a mechanical problem occur, contact LifeSource[®] at 1-888-726-9966.
- Do not attempt to service, calibrate, or repair this monitor.
- Because your UA-851 monitor contains delicate, high-precision parts, avoid exposing it to extremes in temperature or humidity or to direct sunlight, shock and dust. LifeSource[®] guarantees the accuracy of this monitor only when it is stored and used within the temperature and humidity ranges noted on page E-21.
- Clean the monitor and cuff with a dry, soft cloth or a cloth dampened with water and a mild detergent. Never use alcohol, benzene, thinner or other harsh chemicals to clean monitor or cuff.
- Remove and replace batteries if monitor is not used for more than <u>six</u> <u>months</u>. Alkaline batteries recommended.

PRECAUTIONS

The UA-851 is designed to be used at home, by those who are eighteen (12) years and older, to monitor blood pressure (systolic and diastolic) and pulse rate.

IMPORTANT SAFETY INSTRUCTIONS - SAVE THESE INSTRUCTIONS DANGER - TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, CAREFULLY FOLLOW THESE INSTRUCTIONS.

- For connection to a supply not in the U.S.A., use an attachment plug adapter of the proper configuration for the power outlet.
- The power unit (AC Adapter) is intended to be correctly oriented in a vertical or floor mount position.



Fast. Easy. Accurate.

Congratulations on purchasing a state-of-the-art LifeSource[®] blood pressure monitor—one of the most technologically advanced monitors available today. Designed for ease of use and accuracy, this monitor will facilitate your daily blood pressure regimen.

Physicians agree that daily self-monitoring of blood pressure is an important step individuals can take to maintain cardiovascular health and prevent the serious consequences associated with undetected and untreated hypertension.

A&D Medical has been manufacturing high quality healthcare products for over 20 years. We are committed to providing you and your family with monitoring devices that provide the utmost in accuracy and convenience.

LifeSource - Designed for Life.

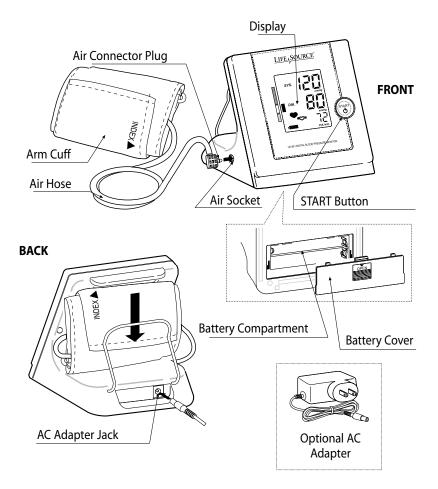
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Display/ Symbol	Condition/Cause	Recommended Action
The symbol shown while measure ment is in progress. It blinks while detecting the pulse.		Measurement is in progress, remain as still as possible.
((\))	An irregular heartbeat or body movement may have occurred. Refer to page E-11 for more infor- mation on irregular heartbeats.	Take measurement again and consult with your physician.
Μ	Previous measurement stored in MEMORY.	
E Battery Full	The battery power indicator during measurement.	Replace all batteries with new
E Battery Low	The batteries are low when it blinks.	ones when the symbol blinks. Alkaline batteries recommended.
	Unstable blood pressure due to excessive body movement.	Try the measurement again. Remain very still during the measurement.
Err	The systolic and diastolic values are within 10 mmHg of each other.	Fasten the cuff correctly, and try the measurement again.
	The pressure value did not increase during inflation.	Check for air leaks along the tube and around the air socket.
Err FIIF	The cuff is not fastened correctly.	Refasten the cuff and retake mea- surement.
EUF	There is an air leak in the cuff or monitor.	Make sure tube is properly con- nected to cuff and monitor.
Err Pulse display error	The pulse is not detected correctly.	Try the measurement again. Remain very still during the measurement.
	Cuff Inflation Meter	Measurement is in progress, remain as still as possible.
	Pressure Rating Indicator™	Refer to the section "About Pressure Rating Indicator" for further explanation.





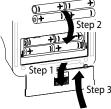
LifeSource[®] blood pressure monitors are easy to use, accurate and digitally display full measurement readouts. Our technology is based on the "oscillometric method" – a noninvasive blood pressure determination. The term "oscillation" refers to any measure of vibrations caused by the arterial pulse. Our monitor examines the pulsatile pressure generated by the arterial wall as it expands and contracts against the cuff with each heartbeat.

The cuff is inflated until the artery is fully blocked. The inflation speed is maximized and the pressure level is optimized by the device. The monitor takes measurements while the cuff is both inflating and deflating. This results in a faster measurement providing greater comfort to the user.

BEFORE YOU START

You must install 4 type AA (1.5 volt) batteries (included), or use the optional AC Adapter (see page E-14 for using the Monitor with AC Adapter) and attach the cuff to the monitor before using it. To install batteries (or replace them if the "Low Battery" symbol appears on display), proceed as follows:

- 1. Remove battery compartment cover by gently pushing down on arrow and sliding cover forward.
- 2. Put in bottom row of batteries first. Place the batteries in compartment with positive (+) and negative (-) terminals matching those indicated in the compartment. Be sure batteries make contact with compartment terminals.



3. Replace cover by sliding it into the compartment and gently pressing into place.

F-4

NOTE: Rechargeable batteries will not work with this monitor.

Using the correct cuff size is important for an accurate reading. A cuff that is too large will produce a reading that is lower than the correct blood pressure; a cuff that is too small will produce a reading that is higher than the correct blood pressure. With your arm hanging at the side of your body, measure the circumference of your upper arm at the midpoint between the shoulder and elbow.

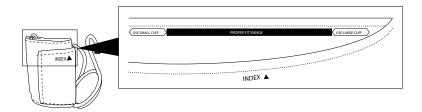
ARM SIZE	RECOMMENDED CUFF SIZE	REPLACEMENT CUFF MODEL #	
9.4" - 14.2" (24 - 36cm)	Medium Cuff	UA-280	
14.2" - 17.7" (36-45cm)	Large Cuff	UA-281	

NOTE: The LifeSource small cuff is not compatible with the UA-851 monitor.

Cuff Size Indicator On The Cuff

Our cuff has an indicator which tells you whether you are using the correct cuff size or not. Place the cuff on your arm (see Page E-6 to learn how to put the cuff on correctly) and if the Index Mark \blacktriangle points within the Proper Fit Range, you are using the correct cuff size. If the Index points outside of the Proper Fit Range, contact A&D Medical at 1-888-726-9966 (in Canada, call Auto Control Medical at 1-800-461-0991) for more information on where to obtain a cuff replacement.

NOTE: If the cuff size indicator falls on a borderline between two size categories, pick either one and make sure to use the same cuff size for each measurement.



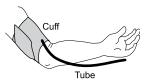
TAKING YOUR BLOOD PRESSURE

Tips for Blood Pressure Monitoring:

- Relax for about 5 minutes before measurement.
- Do not smoke or ingest caffeine at least 30 minutes prior to measurement.
- Remove constricting clothing and place cuff on bare arm.
- Unless your physician recommends otherwise, use left arm to measure pressure.
- Do not talk during measurement.
- Do not cross legs and keep your feet flat on floor during measurement.

Now you are ready. Follow these simple steps:

- 1. Sit comfortably with your left arm resting on a flat surface so that the center of your upper arm is at the same height as your heart.
- 2. Lay left arm on the table, palm up and thread cuff end through metal loop, smooth size against arm. Then position the tube off-center toward the inner side of arm in line with the little finger.
- 3. Secure cuff around arm. The cuff should be snug but not too tight. You should be able to insert two fingers between the cuff and your arm.
- 4. Confirm that the Index Mark ▲ points within the proper fit range.











5. Press the START button. As the cuff pressurizes, measurement will begin and the Cuff Inflation Meter will show on the display screen. It is normal for the cuff to feel very tight.

Note: If an appropriate pressure is not obtained, the device automatically starts to inflate again.

Note: If you wish to stop inflation at any time, press the START button again.

6. When the measurement is complete, the systolic and diastolic pressure readings and pulse rate are displayed. The cuff deflates and the monitor automatically shuts off after 60 seconds, or you can turn it off by pressing the START button. Your measurement is automatically stored in memory (the monitor can store up to 90 readings in memory).

NOTE: If you press the MEMORY button before the auto shut-off, the current measurement will not be stored into memory.



7. Remove cuff and make note of your blood pressure and pulse rate in the Blood Pressure Logbook, indicating the date and time of measurement.

IMPORTANT: Measure blood pressure at the same time each day.





Measurement with the desired systolic pressure:

If your systolic pressure is expected to exceed 230 mmHg follow these steps:

- 1. Place the cuff on the left arm, unless your physician tells you otherwise.
- 2. Press and hold the START button until a number 30 to 40 mmHg higher than your expected systolic pressure appears.
- 3. Release the START button when the desired number is reached. 280 mmHg is the highest pressure level the monitor can reach. Measurement will then begin. Continue to measure your blood pressure as described on Page E-8.

THIS DOESN'T WORK



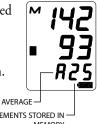


The Cuff Inflation Meter is located on the left side of the display screen to tell you when the blood pressure monitor is inflating and deflating the cuff. The Cuff Inflation Meter moves up during inflation and moves down during deflation.

Inflation in Progress	Inflation Complete	Deflation/Measurement in Progress
	<i>1</i> 50	90



The UA-851 provides an average blood pressure reading based on the total measurements stored in memory. The average blood pressure reading appears briefly when you recall the measurements stored in memory. You can also access your average readings by pressing and holding the START button.



NUMBER OF MEASUREMENTS STORED IN MEMORY

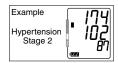


ABOUT PRESSURE RATING INDICATOR™

The Pressure Rating Indicator[™] is a feature which provides a snapshot of your blood pressure classification based on your measurements. This will let you quickly know what your blood pressure readings mean. Each segment of the bar indicator corresponds to the Seventh Report of the Joint National Committee (JNC7) on Prevention, Evaluation and Treatment of High Blood Pressure from the National Heart, Lung and Blood Institute - May 2003. For a more detailed look at this blood pressure classification, please refer to "Assessing High Blood Pressure" on page E-16.

JNC7 Classification Indicator

Stage 2 Hypertension Stage 1 Hypertension Prehypertension Normal



:The indicator displays a segment, based on the current measurement, corresponding to the JNC7 Classification.

NOTE: Due to other risk factors (e.g. diabetes, obesity, smoking, etc.) in addition to your blood pressure measurement, the Pressure Rating Indicator is approximate. Please consult with your physician for interpretation and diagnosis of your blood pressure measurements.



NOTE: This device stores the last 90 measurements in memory. The data is retained as long as the batteries are in the device. When you remove the batteries or the batteries are drained, the data will be erased.

- 1. Press and hold the START button.
- 2. The average data of all the measurements and the number of measurements stored are displayed. The memory data is displayed starting

from the most recent. After the last reading is displayed, the monitor automatically shuts off.

Clearing the memory data



Average of all readings

 Press and hold the MEMORY button until the "[™]" (memory) mark blinks to clear the stored data.

THIS DOESN'T WORK



USING THE OPTIONAL AC ADAPTER

The UA-851 has an AC adapter jack to allow you to supply power from an outlet in your home. We recommend you use only the optional LifeSource AC adapter to avoid potential damage to the monitor. To purchase the optional AC Adapter, please contact our LifeSource Health Line at 1-888-726-9966.

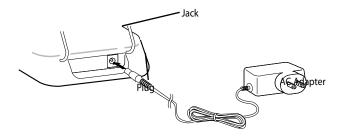
Connecting the AC adapter to the monitor:

- 1. Gently insert the AC adapter plug into a 120V AC outlet.
- 2. Connect the AC adapter plug into the jack on the back of the monitor.

Disconnecting the AC adapter from the monitor:

- 1. Turn the unit off by pressing the START button.
- 2. Disconnect the plug from the jack of the monitor quickly.
- 3. Gently remove the AC adapter from the outlet.

NOTE: If monitor has batteries and an AC adapter connected, the measurements stored in memory will be lost if AC adapter is unplugged from the wall first. To ensure that measurements remain in memory, make sure the unit is off and that the jack plugged into the monitor is removed quickly before unplugging adapter from the wall.



What Is Blood Pressure?

Blood pressure is the force exerted by blood against the walls of the arteries. Systolic pressure occurs when the heart contracts; diastolic pressure occurs when the heart expands. Blood pressure is measured in millimeters of mercury (mmHg).

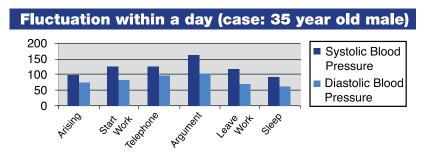
What Affects Blood Pressure?

Blood pressure is affected by many factors: age, weight, time of day, activity level, climate, altitude and season. Certain activities can significantly alter one's blood pressure. Walking can raise systolic pressure by 12 mmHg and diastolic pressure by 5.5 mmHg. Sleeping can decrease systolic blood pressure by as much as 10 mmHg. Taking your blood pressure repeatedly without waiting an interval of 5 minutes between readings, or without raising your arm to allow blood to flow back to the heart, can also affect it.

In addition to these factors, beverages containing caffeine or alcohol, certain medications, emotional stress and even tight-fitting clothes can make a difference in the readings.

What Causes Variations In Blood Pressure?

An individual's blood pressure varies greatly from day to day and season to season. For hypersensitive individuals, these variations are even more pronounced. Normally, blood pressure rises during work or play and falls to its lowest levels during sleep.



LifeSource Health Line (Toll-Free): 1-888-726-9966

Assessing High Blood Pressure for Adults

The following standards for assessing high blood pressure (without regard to age or gender) have been established as a guideline. Please note that other risk factors (e.g. diabetes, obesity, smoking, etc.) need to be taken into consideration and may affect these figures. Consult with your physician for an accurate assessment.

BP Classification	Systolic (mmHg)		Diastolic (mmHg)	
Normal	< 120	and	< 80	
Prehypertension	120-139	or	80-89	
Stage 1 Hypertension	140-159	or	90-99	
Stage 2 Hypertension	≥ 160	or	≥ 100	

JNC7 Classification Table – for adults within the U.S.

SOURCE: The Seventh Report of the Joint National Committee on Prevention, Evaluation and Treatment of High Blood Pressure for Adults. National Heart, Lung and Blood Institute - May 2003.

WHO Classification Table - for adults outside of the U.S. (e.g. Canada, Mexico)

BP Classification	Systolic (mmHg)		Diastolic (mmHg)	
Optimal	< 120	and	< 80	
Normal	< 130	or	< 85	
High-Normal	130-139	or	85-89	
Stage 1 Hypertension	140-159	or	90-99	
Stage 2 Hypertension	160-179	or	100-109	
Stage 3 Hypertension	≥ 180	or	≥ 110	

SOURCE: Standards to assess high blood pressure, without regard to age or gender, have been established by the World Health Organization (WHO).



Have regular physical checkups

Maintain proper weight.

Exercise routinely.

What Is Hypertension?

Hypertension (high blood pressure) is the diagnosis given when readings consistently rise above normal. It is well known that hypertension can lead to stroke, heart attack or other illness if left untreated. Referred to as a "silent killer" because it does not always produce symptoms that alert you to the problem, hypertension is treatable when diagnosed early.

Can Hypertension Be Controlled?

In many individuals, hypertension can be controlled by altering lifestyle and minimizing stress, and by appropriate medication prescribed and monitored by your doctor. The American Heart Association recommends the following lifestyle suggestions to prevent or control hypertension:

Don't smoke.

Reduce salt and fat intake.

Monitor your blood pressure at periodic intervals.

Why Measure Blood Pressure at Home?

It is now well known that, for many individuals, blood pressure readings taken in a doctor's office or hospital setting might be elevated as a result of apprehension and anxiety. This response is commonly called "white coat hypertension." In any case, self-measurement at home supplements your doctor's readings and provides a more accurate, complete blood pressure history. In addition, clinical studies have shown that the detection and treatment of hypertension is improved when patients both consult their physicians and monitor their own blood pressure at home.



Answers to Why Your Readings Are Different Between Home and at the Doctor's Office

Why are my readings different between home and at a doctor's office?

Your blood pressure readings taken in a doctor's office or hospital setting may be elevated as a result of apprehension and anxiety. This response is known as white coat hypertension.

When I bring my monitor to a doctor's office, why do I get a different measurement from my monitor to that taken by a doctor or nurse?

The healthcare professional may be using a different sized cuff. The size of the bladder inside the cuff is critical for the accuracy of the measurement. This may give you a different reading. A cuff too large will produce a reading that is lower than the correct blood pressure; a cuff that is too small will produce a reading that is higher than the correct blood pressure. There may also be other factors that can cause the difference in measurements.

Keys to Successful Monitoring:

Blood pressure fluctuates throughout the day. We recommend that you are consistent in your daily measurement routine:

- Measure at the same time every day.
- Sit in the same chair/position.
- Do not cross legs and keep your feet flat on the floor.
- Relax for 5 minutes before measurement.
- Use the correct cuff size to get an accurate reading.
- Sit still during measurement no talking, eating or sudden movements.
- Record your measurement in the logbook.



Establishing Baseline Measurements

The most important method to get an accurate blood pressure measurement is consistency. To get the most benefit out of your monitor, it is important to establish a "baseline measurement." This helps build a foundation of measurements that you can use to compare against future readings. To build this baseline measurement, devote two weeks for consistent blood pressure monitoring. This involves doing everything the same way when you measure (e.g. measuring during the same time of day, in the same location, sitting in the same chair, using the same cuff, etc.). Once you establish your baseline measurement, you can start evaluating if your measurement has been affected based on things lifestyle changes or medication treatment.

How Do I Record My Blood Pressure?

Blood pressure readings are typically recorded with the systolic pressure written first, followed by a slash mark and the diastolic pressure. For example, 120 mmHg systolic and 80 mmHg diastolic measurements are written as 120/80. Pulse is simply written with the letter "P" followed by the pulse rate—P 72, for example. Please see the back of the manual for the blood pressure tracking log.

Customer Support Tools Online

Additional tools are available on www.LifeSourceOnline.com to help you get the most out of your blood pressure monitoring. These include:

- Large Print Instruction Manuals
- Animated Operating Instructions
- Additional Logbook Sheets



Problem	Probable Cause	Corrective Action	
Nothing appears in the display, after I press the START button.	Batteries are drained.	Replace all batteries with new ones. Alkaline batteries recom- mended.	
	Battery terminals are not in the correct position.	Reinstall the batteries with nega- tive and positive terminals match- ing those indicated in the battery compartment.	
The cuff does not inflate.	Battery voltage is too low. Low battery symbol blinks. [If the batteries are drained completely, the mark does not appear.]	Replace all batteries with new ones. Alkaline batteries recom- mended.	
The unit does not measure. Readings are	The cuff is not fastened prop- erly.	Fasten the cuff correctly.	
too high or too low.	You moved your arm or body during the measurement.	Make sure you remain very still and quiet during the measurement.	
	The cuff position is not correct.	Sit comfortably and still. Make sure the cuff is at the same level as your heart.	
	You are using the wrong size cuff.	See Pg. E-5 "Selecting the Correct Cuff."	
	Taking too many readings on the same arm in a short period of time.	Relax five minutes before each measurement.	
The value is different from that measured at a clinic or doctor's office.	The healthcare professional may be using a different sized cuff.	See Pg. E-18 "Answers to Why Your Readings Are Different Between Home and the Doctor's Office."	
	Your measurements may be elevated by white coat hyperten- sion	See Pg. E-17 "Why Measure Blood Pressure at Home."	

NOTE: If the actions described above do not solve the problem, call 1-888-726-9966. Do not attempt to repair the device yourself.

SPECIFICATIONS

Model	UA-851
Туре	Oscillometric
Display	
	Pressure/pulse displayed simultaneously
Memory	
Measurement range	Pressure: 20 mmHg to 280 mmHg
	Pulse: 40 pulses to 180 pulses
Accuracy	Pressure: ±3 mmHg or ±2%,
	whichever is greater
	Pulse: ±5%
Pressurization	Automatic, using micropump
Depressurization	
Power source	
	batteries (included) or 120 V
	AC Adapter (optional)
Battery life	Approximately 4 months with
	one daily measurement
Operating environment	50°F to 104°F (10°C to 40°C)
	Less than 85% relative humidity
Storage environment	-14°F to 140°F (-10°C to 60°C)
	Less than 95% relative humidity
Dimensions	Length: 4.7"(120 mm)
	Width: 5.9"(150 mm)
	Height: 6.1" (156 mm)
Weight	17.6 oz. (500 g) without batteries

Blood pressure measurements determined by the UA-851 are equivalent to those obtained by a trained observer using the cuff/stethoscope auscultation method within the limits prescribed by the American National Standards Institute for electronic or automated sphygmomanometers.

CONTACT INFORMATION

Our products are designed and manufactured using the latest scientific and technological methods, and offer accurate, easy to use, home monitoring and treatment options. Our full product line includes:

- Digital Blood Pressure Monitors
- Manual Blood Pressure Monitors
- Blood Pressure Cuffs
- Stethoscopes
- Personal Health Scales
- Digital Thermometers

This LifeSource[®] blood pressure monitor is covered by a Lifetime Warranty. See warranty card for details.

Visit our web site at www.LifeSourceOnline.com for warranty registration.

For more information regarding use, care or servicing of your blood pressure monitor, contact:

A&D Medical A division of A&D Engineering, Inc. 1756 Automation Parkway San Jose, CA 95131 LifeSource Health Line (Toll-Free): 1-888-726-9966 www.LifeSourceOnline.com Ask your local retailer or Pharmacist about these and other LifeSource[®] products.

Pregunte en sus establecimientos o farmacia locales acerca de los productos LifeSource[®].



Personal Scales Balanza de uso personal

Digital Thermometers Termómetros digitaless





Stethoscopes Estetoscopios



BLOOD PRESSURE RECORD JOUNAL DE LA TENSION ARTÉRIELLE REGISTRO DE LA PRESION ARTERIAL

Name: Nom: Nombre:		Age: Âge: Edad:		Weigh Poids: Peso:	t:	
DATE DATE FECHA	AM AM AM	SYS/DIA SYS/DIA SIS/DIA	PULSE POULS PULSO	PM PM PM	SYS/DIA SYS/DIA SIS/DIA	PULSE POULS PULSO



BLOOD PRESSURE RECORD JOUNAL DE LA TENSION ARTÉRIELLE REGISTRO DE LA PRESION ARTERIAL

Name: Nom: Nombre:		Age: Âge: Edad:		Weigh Poids: Peso:	t:	
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IMPORTANT!

If You Need Assistance with the Set-Up or Operation

We Can Help!

Please call us FIRST before contacting your retailer at

LifeSource[®] Customer Service Line

1-888-726-9966 - Toll Free

A specially trained representative will assist you.



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